

ABSTRACT

25 The present invention provides a vehicle control system, which easily carries
out modifications such as updating and improvement of the system, improving the
transmission efficiency of the data and responsiveness of the system, and allowing the
redundancy to be effectively used even during normal operation of the network. In the
vehicle control system, an electric control device is formed comprising a cooperative
30 control ECU which acts as a server apparatus and a plurality of subsystems which are
connected to this cooperative control ECU and act as client apparatuses. The plurality
of subsystems comprise, for example, a motor control ECU, a reactive gas supply
control ECU, an electrical power distribution control ECU, and a cell voltage detection
control ECU. Each of the ECUs which forms each of the subsystems carries out I/O
35 processing for the control signals that are sent to and received from the cooperative
control ECU and shut down processing and protective processing during abnormal
operation such as a network stoppage. The cooperative ECU carries out control
operations for controlling each of the ECUs and the controlled objects based on control
signals obtained from the I/O processing of each of the ECUs.

40